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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/512,087	04/07/2005	Kiyoaki Takiguchi	261189US6PCT	9110
22850	7590	10/11/2007		
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER PARK, EDWARD	
			ART UNIT 2624	PAPER NUMBER
			NOTIFICATION DATE 10/11/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/512,087	Applicant(s) TAKIGUCHI, KIYOAKI	
	Examiner Edward Park	Art Unit 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 59-74 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 59-74 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 November 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>11/09/04, 8/25/06</u> | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Objections

1. **Claim 60** is objected to because of the following informalities: The phrase, “according to Claim 59” appears to be a typographical error. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. **Claims 59-62, 64-68, 70-73** are rejected under 35 U.S.C. 102(b) as being anticipated by Miura et al (US 2002/0028004 A1).

Regarding **claim 59**, Miura teaches a biometric pattern detecting device comprising:
a light source unit configured to emit a light to be reflected or scattered in a part of body (Miura: figure 5, numeral 2);

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and a detecting unit configured to detect an image of the light reflected or scattered in the part of body by the light source unit (Miura: figure 5, numeral 4) and generate a biometric pattern using the detected image (Miura: figure 9), wherein the light source unit is set in a horizontal direction or a horizontally slanted direction with respect to the part of body (Miura: figure 5, numeral 2) and the detecting unit is set in a vertical direction or a vertical slanted direction with respect to the part of body (Miura: figure 5, numeral 4).

Regarding **claim 60**, Miura teaches detecting unit detects the image of the light reflected or scattered in the body on the different position from the position of the light emitted by light source unit (Miura: figure 5).

Regarding **claim 61**, Miura teaches wherein the part of body is a finger or a hand (Miura: figure 5, numeral 20).

Regarding **claim 62**, Miura teaches wherein the biometric pattern is a pattern of blood vessels (Miura: paragraph [0033]).

Regarding **claim 64**, Miura teaches a guide unit set between the detecting unit and the part of body (Miura: figure 5, numeral 1).

Regarding **claim 65**, Miura teaches a personal authentication device comprising:
a light source unit configured to emit a light to be reflected or scattered in a part of body (Miura: figure 5, numeral 2);
a detecting unit configured to detect an image of the light reflected or scattered in the part of body by the light source unit (Miura: figure 5, numeral 4) and for generating a biometric pattern using the detected image (Miura: figure 9);
a storage unit configured to store a biometric pattern (Miura: paragraph [0008]); and

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an authentication unit configured to perform an authentication process by comparing the biometric pattern generated by the detecting unit with the biometric pattern stored by the storage unit (Miura: figure 9), wherein the light source unit is set in a horizontal direction or a horizontally slanted direction with respect to the part of body (Miura: figure 5, numeral 2) and the detecting unit is set in a vertical direction or a vertical slanted direction with respect to the part of body (Miura: figure 5, numeral 4).

Regarding **claim 66**, Miura teaches detecting unit detects the image of the light reflected or scattered in the body on the different position from the position of the light emitted by light source unit (Miura: figure 5).

Regarding **claim 67**, Miura teaches wherein the part of body is a finger or a hand (Miura: figure 5, numeral 20).

Regarding **claim 68**, Miura teaches wherein the biometric pattern is a pattern of blood vessels (Miura: paragraph [0033]).

Regarding **claim 70**, Miura teaches a guide unit set between the detecting unit and the part of body (Miura: figure 5, numeral 1).

Regarding **claim 71**, Miura teaches a method of performing personal authentication, comprising:
emitting a light to be reflected or scattered in a part of body (Miura: figure 5, numeral 2);
detecting an image of the light reflected or scattered in the part of body (Miura: figure 5, numeral 4);
generating a biometric pattern using the detected image (Miura: figure 9);

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performing an authentication process by comparing the generated biometric pattern with a stored biometric pattern (Miura: figure 9),

wherein the emitted light is emitted from a horizontal direction or a horizontally slanted direction with respect to the part of body (Miura: figure 5, numeral 2) and the image of the light reflected is detected in a vertical direction or a vertical slanted direction with respect to the part of body (Miura: figure 5, numeral 4).

Regarding **claim 72**, Miura teaches wherein the part of body is a finger or a hand (Miura: figure 5, numeral 20).

Regarding **claim 73**, Miura teaches wherein the biometric pattern is a pattern of blood vessels (Miura: paragraph [0033]).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 63, 69, 74** are rejected under 35 U.S.C. 103(a) as being unpatentable over Miura et al (US 2002/0028004 A1) in view of Murakami et al (US 6,483,929 B1).

Regarding **claim 63**, Miura discloses all elements as mentioned above in claim 59. Miura does not teach a near-infrared light.

Murakami teaches a near-infrared light (Murakami: col. 6, lines 42-52)

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It would have been obvious at the time the invention was made to one of ordinary skill in the art to modify the Miura reference to utilize a near-infrared light as suggested by Murakami, to “penetrate the skin of the finger and absorb or reflect off the user’s skin and subskin tissues an, specifically, arterial tissues ... [in order for] the reflected light [to be received by the system and converted into an electronic signal, which can then be stored in some electronic format” (Murakami: col. 6, lines 42-52).

Regarding **claim 69**, Miura discloses all elements as mentioned above in claim 65. Miura does not teach a near-infrared light.

Murakami teaches a near-infrared light (Murakami: col. 6, lines 42-52)

It would have been obvious at the time the invention was made to one of ordinary skill in the art to modify the Miura reference to utilize a near-infrared light as suggested by Murakami, to “penetrate the skin of the finger and absorb or reflect off the user’s skin and subskin tissues an, specifically, arterial tissues ... [in order for] the reflected light [to be received by the system and converted into an electronic signal, which can then be stored in some electronic format” (Murakami: col. 6, lines 42-52).

Regarding **claim 74**, Miura discloses all elements as mentioned above in claim 71. Miura does not teach a near-infrared light.

Murakami teaches a near-infrared light (Murakami: col. 6, lines 42-52)

It would have been obvious at the time the invention was made to one of ordinary skill in the art to modify the Miura reference to utilize a near-infrared light as suggested by Murakami, to “penetrate the skin of the finger and absorb or reflect off the user’s skin and subskin tissues an, specifically, arterial tissues ... [in order for] the reflected light [to be received by the system

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and converted into an electronic signal, which can then be stored in some electronic format”
(Murakami: col. 6, lines 42-52).

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward Park whose telephone number is (571) 270-1576. The examiner can normally be reached on M-F 10:30 - 20:00, (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Werner can be reached on (571) 272-7401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Edward Park/

Edward Park
Examiner
Art Unit 2624



BRIAN WERNER
SUPERVISORY PATENT EXAMINER

